

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 05172732  
PUBLICATION DATE : 09-07-93

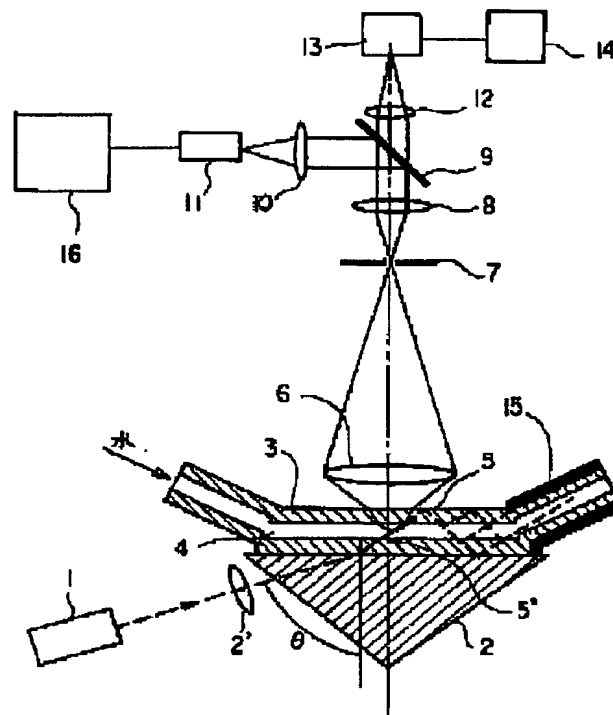
APPLICATION DATE : 25-12-91  
APPLICATION NUMBER : 03342822

APPLICANT : HITACHI ELECTRON ENG CO LTD;

INVENTOR : KIMURA TOSHIHIRO;

INT.CL. : G01N 15/14 G01N 21/53

TITLE : METHOD AND APPARATUS FOR  
DETECTING PARTICLE IN LIQUID



ABSTRACT : PURPOSE: To enable usage of a lens of which aperture number and beam collection solid angle both are quite large by the reason of no existence of direct permeating beam of irradiation beam in-use for detection, and to enable detection of fine particles of less than 0.1 micron in liquid.

CONSTITUTION: A flow cell 3 in which sample liquid flows is provided with a transparent body, that is a prism 2, of which refraction index is greater than that of the air, 1 in contact with the cell, and is irradiated through the prism 2. The irradiation beam is made to reflect totally in the flow cell and then the totally reflected beam is removed by an optical trap 15 and thereby only the beam scattered by the fine particles in the sample liquid is collected by a collection lens 6 to be led to a detection system and consequently the fine particles in the liquid can be detected.

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